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Verbal Irony: Differences in Usage Across Written Genres

Christian Burgers[1], Margot van Mulken[2], and Peter Jan Schellens[2]

Abstract

According to Gibbs and Colston, one of the biggest challenges for irony research is the uncovering of the various ways in which irony is used in discourse. This article takes up a genre-based approach to deal with this research challenge. In a content analysis of ironic utterances from six written genres (commercial and noncommercial advertisements, columns, cartoons, letters to the editor, book and film reviews), ironic utterances are compared on the usage of irony factors and irony markers. Results indicate that every genre in the corpus differs from the general distribution for at least one irony factor and one category of irony markers. Taken together, the clustering of irony factors and markers in specific genres is a first step toward identifying the various ways in which verbal irony is used differently across various genres.

Keywords

verbal irony, genre, written communication, discourse analysis, pragmatics, nonliteral language

"Wow, that's a great idea, John!" If somebody really means that John's idea is very good, this comment is a literal compliment. However, if somebody believes that John's idea is rather poor, this comment should not be taken literally but as an ironic statement. Studies have shown that the use of such an ironic comment can serve different communicative purposes including evoking humor (e.g., Matthews, Hancock, &

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Dunham, 2006), evoking a sense of solidarity between speaker and addressee (e.g., Van Mulken, Burgers, & Van der Plas, 2011) and diminishing (e.g., Dews & Winner, 1997) or enhancing (Matthews et al., 2006) critique.

The myriad possible communicative goals of ironic comments indicate that irony can be used in a variety of ways. Some scholars suggest that irony has various subtypes (see Gibbs & Colston, 2007). However, few studies have actually focused on irony in usage and the studies that do so, disagree on the different distinctions that can be made between ironic utterances. For instance, Gibbs (2000) analyzes hyperbole, jocularity, and understatements as subtypes of irony, whereas Whalen, Pexman, and Gill (2009) claim that none of these types of speech is necessarily ironic. Given the fact that irony is used relatively often in communication (±8% of turns in conversations between friends is ironic, Gibbs, 2000; 7.4% of e-mails sent to friends contain irony, Whalen et al., 2009; 72.8% of blog entries contain irony, Whalen, Pexman, Gill, & Nowson, in press), uncovering of the ways in which irony is used in communicative situations is one of the major research challenges for irony studies (Gibbs & Colston, 2007).

Hancock (2004) provides the first empirical evidence that irony is used differently in different communicative situations. In Hancock's (2004) study, participants in either a face-to-face (FtF) or a computer-mediated communication (CMC) setting were asked to discuss a certain scenario that was supposed to evoke irony. His results demonstrate that irony is indeed used differently in the two modalities of spoken and written discourse. A follow-up question to the Hancock (2004) study is if irony is also used differently in different communicative situations in one modality.

Additionally, Hancock's (2004) data were collected with an experiment that aimed to let participants spontaneously create ironic utterances. A point of critique on this method is related to ecological validity: the issue could be raised if participants would have produced ironic utterances in a similar way when they use irony outside of a laboratory setting. To bolster Hancock's (2004) claim that irony is used differently in different communicative situations, his data should be supplemented with natural language data.

This article takes up on these challenges and investigates how irony is used within different communicative situations in one modality. Since most studies on irony in usage focus on spoken communication (see Bryant & Fox Tree, 2002; Gibbs, 2000), this study focuses on irony in the modality of written communication. This distinction is important, because irony may differ in subtle and important ways between written and spoken communication. For instance, in contrast to irony in conversations (see Gibbs, 2000), writers who use irony cannot "repair" their text when a reader does not understand the irony.

Furthermore, written communication also gives a good way of assessing irony use in different communicative situations: A written ironic utterance is always produced in a text that in turn belongs to a specific genre. Various genres come with their own characteristics and expectations (e.g., Biber, 1993; Steen, 1999) and the question of what is "typical language" varies between written genres (Biber, 1993). An analysis of

irony in a variety of written genres is thus a good way of assessing if irony is indeed used differently in different communicative situations within one modality.

Irony Factors and Markers

When comparing ironic utterances, an important question is which aspects to use for this comparison. Attardo (2000a) provides a useful distinction between irony factors and irony markers, which is adopted for this purpose in this article. In this distinction, an irony factor is a characteristic of the ironic utterance. This means that an irony factor cannot be removed from the ironic utterance without destroying the irony. If an irony factor were to be removed from an utterance, the irony "would cease to exist" (Attardo, Eisterhold, Hay, & Poggi, 2003, p. 244). In contrast, an irony marker is a meta-communicative clue that can "alert the reader to the fact that a sentence is ironical" (Attardo, 2000a, p. 7). So, an irony marker helps a reader in detecting irony and can—in theory—be deleted from an ironic utterance without removing the irony.

Let us give an example of an irony factor and a marker. Many authors claim that irony always needs to include some sort of evaluation (e.g., Grice, 1978; Kotthoff, 2003). Of course, this evaluation may come in different ways: The evaluation may be explicitly announced (as in "Great weather, eh" when the weather was actually bad) or it may be up to the reader to infer the evaluation (as in the example of "Oh Tuscany in May," Wilson & Sperber, 1992). This means that evaluativeness (including an evaluation) is an irony factor, because every ironic utterance includes some form of evaluation. In contrast, irony markers can be removed from the irony. If somebody ironically exclaims "That's the best idea ever!" then this ironic utterance is marked with hyperbole. If the hyperbole is removed from the irony ("That's a good idea!"), the utterance is still ironic, but it may be more difficult for readers to detect this.

Since irony is constituent on its factors, a fruitful way to identify irony factors is by looking at the definition of irony (Attardo et al., 2003). However, the definition of irony is far from fixed and has been a topic of much debate among irony scholars (see Attardo, 2000b; Grice, 1978; Giora, 1995; Wilson & Sperber, 1992, and many others). In a previous study, we compared the different definitions of irony and found that these definitions agreed that irony should at least have five elements. It should (a) be evaluative, (b) be based on incongruence of the ironic utterance with the co- or context, (c) be based on a reversal of valence between the literal and intended meaning, (d) be aimed at some target, and (e) be relevant to the communicative situation in some way (Burgers, Van Mulken, & Schellens, 2011).[1] Every ironic utterance needs to have all these five factors in order to be qualified as ironic. Therefore, they can be labeled as irony factors; every ironic utterance has to meet these five requirements in some way, and the factors serve to differentiate between irony and nonirony; they are thus useful factors to discriminate ironic from nonironic utterances.

At the same time, these five irony factors manifest themselves concretely in ironic utterances. In doing so, irony factors have levels that differ across ironic utterances. For instance, irony should include a reversal of valence, which can be achieved in two

distinct ways. It is possible that the literal meaning of the irony is positive (ironic praise—e.g., "that is a good idea" if the idea is very poor) or negative (ironic blame—e.g., "that is a bad idea" if the idea is very good).[2] This means that the irony factor of a reversal of valence for instance includes the sublevels of praise and blame. In other words, although any ironic utterance has to contain a reversal of evaluative valence, the exact nature of this reversal may vary across different ironic utterances. Although irony factors themselves can thus be used to separate irony from nonirony, the levels of irony factors may be used to differentiate between ironic utterances.

The first irony factor is the evaluativeness of an ironic utterance. Although irony should always have an evaluative proposition (e.g., Grice, 1978; Kotthoff, 2003), this evaluation is easier to locate in some ironic utterances than in others. After all, the evaluation is already present in some ironic utterances (explicitly evaluative irony), whereas in other ironic utterances, it has to be inferred (implicitly evaluative irony, e.g., Bosco & Bucciarelli, 2008). Suppose that two friends had wanted to go on a picnic, but that it rained on the set date. An explicitly evaluative ironic utterance would be "Great weather, eh?" in which the evaluative term *great* can be substituted for its semantic opposite term *bad*. An implicitly evaluative ironic utterance does not have such an evaluative term that can be reversed like in the ironic statement, "Oh, Tuscany in May" (Wilson & Sperber, 1992).

Second, irony is always dependent on some form of incongruence (e.g., Attardo, 2000b) between the literal meaning of the irony and its co- or context. It is possible that the literal meaning is incongruent with previous knowledge (e.g., Jorgensen, 1996). In that case, the irony is incongruent with the context. It is also possible that the literal meaning is incongruent with something that is mentioned earlier in the text. In that case, the irony is incongruent with the co-text.

One of the irony factors that is discussed most often is the reversal of valence (e.g., Gibbs, 1986; Kreuz & Link, 2002; Matthews et al., 2006). As mentioned earlier, irony can be ironic praise (i.e., irony with a positive literal meaning as in "Good idea, John!" when the idea was bad) and ironic blame (i.e., irony with a negative literal meaning as in "Bad idea, John!" when the idea was good). Various authors have claimed that ironic praise is used much more often in natural language than ironic blame (e.g., Jorgensen, Miller, & Sperber, 1984; Kreuz & Link, 2002). However, it has not yet been investigated if this is the case in all discourse situations.

The fourth irony factor is that irony is always aimed at somebody or something: its target (e.g., Gibbs, 2000). Speakers can ironically mock themselves, which would make the speakers the target of the irony (Kotthoff, 2003). Ironic speakers can also target the addressee (see Weizman, 2001), a third party who is neither sender nor addressee[3] (Weizman, 2001) or a social group that encompasses sender, addressee, and/or a third party (see Pexman, Whalen, & Green, 2010).

Finally, irony should be relevant to the communicative situation (e.g., Kreuz, 1996; Wilson & Sperber, 1992). To specify these circumstances, relevance in ironic utterances can be described as the degree to which an ironic utterance "introduces information about an accessible discourse topic" (Giora, 1995, p. 244). In other words, relevance of ironic utterances refers to the number of inferences that is needed to

Table 1. List of Irony Factors, (Made-Up) Examples Related to an Ironic Comment About an Investment Idea and Sources[a]

Factor	Example	Sources
Evaluatieveness		Bosco and Bucciarelli (2008), Grice (1978), Kotthoff (2003)
Explicitly evaluative	That was a great investment idea!	
Implicitly evaluative	Investing in company X really earned me a lot of money!	
Incongruence		Attardo (2000b), Jorgensen (1996)
Incongruent info absent	That was a great investment idea!	
Incongruent info present	I just filed for bankruptcy because of your suggestion to invest in company X. That was a great investment idea (latter utterance ironic, first utterance not)	
Valence		Gibbs (1986), Kreuz and Link (2002), Matthews et al. (2006)
Ironic praise	That was a great investment idea! (when it was very bad)	
Ironic blame	That was a horrible investment idea! (when it was very good)	
Target		Gibbs (2000), Weizman (2001)
Sender	I had a great investment idea!	
Addressee	You had a great investment idea!	
Third party	Mark had a great investment idea!	
Combination	You and Mark have great investment ideas!	
Relevance		Kreuz (1996), Wilson and Sperber (1992)
Directly relevant	That was a great investment idea!	
Indirectly relevant	I am rich now!	

a. Please note that all five factors are present in every ironic utterance.

connect the ironic utterance to the discourse topic. This means that if an utterance is directly relevant, one inference is needed to do so. If an ironic utterance is indirectly relevant, more than one inference is needed to connect the ironic utterance to the discourse topic. Table 1 gives an overview of the various irony factors and their levels, including an example utterance and academic sources.

In contrast to irony factors, irony markers are not essential in making an utterance ironic and can theoretically be removed from the utterance without letting the utterance lose its ironic meaning. For instance, if a person ironically exclaims that something is a "fantastic" idea, this person marks the irony with quotation marks. If the quotations marks were removed from the utterance (that is a fantastic idea), it is still ironic, although the irony would be more difficult to detect (Attardo, 2000a).

The identification of irony markers has received small but significant attention in the irony literature (e.g., Attardo, 2000a, Kreuz, 1996; Muecke, 1978). An investigation of the literature on irony markers shows that some markers are domain specific. For instance, in speech, irony is often signaled with a change in the tone of voice (see Hancock, 2004) or with air quotes (Attardo et al., 2003). Since this article is concerned with irony in written language, these markers are not considered further. A review of the literature on irony markers shows that four types of markers can be identified.

The first two categories can be classified as the use of subsidiary rhetorical figures as irony markers. The famous distinction between schemes and tropes is insightful here. Schemes are rhetorical figures that modify the form of the message, whereas tropes are figures that require the readers to reinterpret the original message (Hoeken, Swanepoel, Saal, & Jansen, 2009). Metaphors, hyperboles, understatements, and rhetorical questions are tropes that can function as irony markers.

The second category is that of schematic markers. Schematic markers are often based on repetition: an ironic repetition of a nonironic expression introduced earlier in the discourse is referred to as a repetition. An ironic repetition of a familiar nonironic expression that is not mentioned earlier in the discourse is referred to as an echo. Finally, we categorize a change of register as a schematic irony marker as well.

Morpho-syntactic markers are based on morphology (e.g., diminutives) and syntax (e.g., exclamations, tag questions). These markers use variations in morphology and syntax to draw attention to the ironic nature of a statement. Typographic markers, finally, draw attention to the irony by means of typographic devices such as quotation marks and emoticons. Table 2 gives an overview of the various irony markers, including examples and academic sources.

An analysis of irony factors and markers can help gain an insight into the ways in which irony may differ across written genres. Most studies that look at the ways in which irony is used focus either on characteristics of ironic speakers (e.g., Dress, Kreuz, Link, & Caucci, 2008; Ivanko, Pexman, & Olineck, 2004) or irony use in one communicative situation such as the use of irony in conversations among friends (e.g., Gibbs, 2000), televised sitcoms (e.g., Pelsmaekers & Van Besien, 2002), e-mail (Whalen et al., 2009), or blogs (Whalen et al., in press). To the best of our knowledge, the only study to compare irony in different communicative situations is Hancock (2004), who looked at irony in FtF and CMC settings. His results show that irony is indeed used differently in both situations. However, an inspection of his results shows that the results may have been caused by differences in modality. Hancock (2004), for instance, shows that speakers in FtF settings often mark their ironies with intonation, whereas speakers in the CMC condition mark their ironies with typographic cues. One

Table 2. List of Irony Markers, (Made-Up) Examples Related to an Ironic Comment About a Bad Idea and Sources

Marker	Example	Sources
Tropes as irony markers		
Metaphor	You are a rocket scientist.	Ritchie (2005)
Hyperbole	That was the best idea in the history of mankind.	Berntsen and Kennedy (1996), Hancock (2004), Kreuz and Roberts (1995), Muecke (1978)
Understatement	That idea is quite OK.	Muecke (1978), Seto (1998)
Rhetorical question	Could your idea be any better?	Barbe (1995), Muecke (1978)
Schematic irony markers		
Ironic repetition	"John will come up with a good idea" → Indeed, that's a good idea.	Berntsen and Kennedy (1996), Muecke (1978)
Ironic echo	Indeed, that's a good idea.	Berntsen and Kennedy (1996), Muecke (1978)
Change of register	You may grant me the honor of listening to another one of your fine ideas (said to a friend).	Haiman (1998), Hutcheon (1994)
Morpho-syntactic irony markers		
Exclamation	Great idea!	Seto (1998), Wilson and Sperber (1992)
Tag question	That's a great idea, isn't it?	Kreuz (1996)
Focus topicalization	A great idea that is, I believe.	Seto (1998)
Interjections	Well, it is a great idea.	Kreuz and Caucci (2007)
Diminutives	"Dat was een goed ideetje." That was a great little idea.	New in the corpus
Typographic irony markers		
Different typography	It is a **great** idea.	Kreuz, 1996
Capitalization	It is a GREAT idea.	Capelli, 2008; Haiman, 1998
Quotation marks	It is a "great" idea.	e.g., Hancock, 2004; Myers, 1990
Other punctuation marks	It is a great [!] idea.	Attardo, 2000b;
Emoticons	It is a great idea ;-)	Hancock, 2004; Kreuz, 1996
Crossed-out text	It is a terribly ~~great~~ idea.	New in the corpus
Other special signs	Your Idea™ is great.	New in the corpus

explanation for these differences is that these cues are bound to the specific FtF and CMC modalities: CMC speakers could not use intonation and FtF speakers could not use typographic cues to mark their ironies. To bolster Hancock's (2004) claims that irony is used differently in different communicative situations, his results should be supplemented with a study that compares irony across communicative situations within one modality. If the modality is held constant, ironic speakers theoretically have the same linguistic tools at their disposal to create irony. This article's research question is thus the following:

Research Question: How do (a) irony factors and (b) irony markers differ across various written genres?

Method

Materials

All materials were originally in Dutch and came from six written genres: commercial ads, noncommercial ads, columns, cartoons, reviews, and letters to the editor. All these genres are to a certain degree persuasive, although the first two are openly persuasive and aim at a change in behavior, whereas the latter four are opinionative and aim at influencing attitudes or opinions. The genres also differ on the dimensions of auctorial status, multimodality, and expected familiarity with the intentions of the author.

Commercial and noncommercial ads (i.e., PSAs and ads for charity) are openly persuasive, which means that readers may resist the messages and that they are more conscious of the ultimate goal of the message. In contrast, readers may feel that, in some opinionative genres such as reviews, writers are less biased than writers of advertisements. Three of these genres (cartoons and commercial and noncommercial advertisements) are multimodal, in that a combination of image and text is generally used to get the message across, whereas the other genres (columns, book and film reviews, and letters to the editor) are primarily textual. With regard to auctorial status, some genres are written on behalf of companies or organizations (advertisements), by professional individual writers (columns and reviews), or by nonprofessional writers (letters to the editor). This makes these six genres a good base for our comparisons.

The columns, cartoons, reviews, and letters to the editor came from a selection of national and regional newspapers taken from a random week. The commercial and noncommercial advertisements came from a variety of online advertising databases. In total, 213 texts were included in the corpus.

The newspaper texts were generally longer than the advertisements, which also meant that the former group contained more ironic utterances per text ($M = 2.95$, $SD = 3.15$) than the latter ($M = 1.55$, $SD = 1.49$), $t(119.96) = 3.91$, $p < .001$, $r = .34$. However, the advertisements also contained less utterances overall than the newspaper texts: the average irony density (i.e., the number of ironic utterances divided by the total number of utterances in a text) for advertisements with irony ($M = 0.32$, $SD = 0.24$) is higher

than for newspaper texts with irony ($M = 0.13$, $SD = 0.13$), $t(192.97) = 7.16$, $p < .001$, $r = .46$. Every text contained at least one ironic utterance. In total, 456 ironic utterances were included in the corpus.

Procedure and Reliability

Ironic utterances were identified by means of the Verbal Irony Procedure, a method for identifying ironic utterances in written texts (for an explanation of this procedure, see Burgers et al., 2011). To measure intercoder reliability, two student coders coded a subset of the corpus (60 texts, which included 180 utterances; see Wimmer & Dominick, 1987). Each coder could produce a meaningful ironic interpretation of at least 87% of the irony in the corpus.

Subsequently, a coding instruction for the irony factors and markers was set up. The first author then identified irony markers and the levels of the irony factors. To compute intercoder reliability, two student coders independently coded the same subset of 60 texts. Results of the first round of coding show that average agreement for the irony factors was 80.5% (range = 71.0% to 90.6%) and for the irony markers 93.3% (range = 78.9% to 100%). Cases of disagreement were resolved by the first author of the article.

Results

Irony Factors Across Written Genres

We analyze if and how irony factors and markers are used differently across written genres. Table 3 shows the distribution of the levels of irony factors across the written genres. Comparative analyses across the written genres shows genre differences for all irony factors ($\chi^2_{evaluativeness}(5) = 21.09$, $p = .001$, Cramer's $V = .22$, asymptotic method[4]; $\chi^2_{incongruence}(5) = 22.18$, $p < .001$, Cramer's $V = .35$, exact method; $\chi^2_{valence}(5) = 70.95$, $p < .001$, Cramer's $V = .40$, exact method; $\chi^2_{target}(15) = 57.45$, $p < .001$, Cramer's $V = .21$, exact method; $\chi^2_{relevance}(5) = 84.91$, $p < .001$, Cramer's $V = .43$, exact method). Inspection of adjusted standardized residuals[5] shows that every genre in the corpus differs significantly from the general distribution for at least one irony factor. Similarly, a significant relationship between genre and irony factors could be observed for any of the five factors under discussion. This implies that the way in which irony is used in different written genres shows great variety.

Commercial advertisements are the genre that differs most from the general distribution, because irony in this genre is different from irony in the other genres: irony in commercial advertisements is more often ironic blame, the incongruent information is more often present, and its targets are more often the addressee and a combination of sender, addressee, and/or third party. Finally, irony in commercial advertisements is less often explicitly evaluative and directly relevant. Like irony in commercial

Table 3. Frequency of the Various Levels of Irony Factors, by Genre

Irony Factor	Commercial Ads	Noncommercial Ads	Columns	Cartoons	Book/Film Reviews	Letter to Editor
Evaluativeness						
Explicitly evaluative irony	40[a]	51	69	10	63	27
Implicitly evaluative irony	65[b]	33	38	9	35	16
Incongruence						
Incongruent info absent	28[a]	54	64	17[b]	58	18[a]
Incongruent info present	45[b]	30	43	1[a]	40	25[b]
Reversal of valence						
Ironic praise	47[a]	65	94[b]	15	82[b]	35
Ironic blame	54[b]	16	11[a]	4	10	7
Target of the irony						
Sender	11	5	19[b]	0	2[a]	3
Addressee	14[b]	15[b]	1[a]	0	3[a]	3
Third party	64[a]	61	80	17	82[b]	35
Combination	16[b]	3	7	2	11	2
Relevance						
Directly relevant irony	64[a]	51[a]	102[b]	14	95[b]	41[b]
Indirectly relevant irony	41[b]	33[b]	5[a]	5	3[a]	2[a]

Note: a, b = The frequency was "a" lower or "b" higher than might be expected on the basis of row and column totals (i.e., adjusted standardized residuals <−1.96 or >1.96). In some cases, utterances were not included in the analysis: For incongruence, 33 utterances received the label "missing," because coders found it unclear whether incongruent information was present or not in the verbal cotext and for reversal of valence, 16 utterances received the label "missing," because the valence of the literal evaluation remained unclear, according to the coders.

advertisements, irony in noncommercial advertisements is less often directly relevant than expected and has more often the addressee as its target.

Ironic utterances in columns and in book, film, and TV reviews are most similar. They are both more often directly relevant, have more ironic praise, and have less often the addressee as their targets. The biggest difference between these two genres in terms of irony factors can be seen when considering the sender as target of the irony. In book and film reviews, the sender is less often the target than could be expected, while it is more often the target in columns. After all, columns are more personal than any of the other genres in the corpus. Besides, irony in book and film reviews targets

Table 4. Means (and Standard Deviations) for the Occurrence of Irony Markers and the Different Categories of Irony Markers (Tropes, Schematic, Morpho-Syntactic, and Typographic Markers) in the Different Genres (Commercial and Noncommercial Advertisements, Columns, Cartoons, Book and Film Reviews, and Letters to the Editor)

Genre	Tropes	Schematic Markers	Morpho-Syntactic Markers	Typographic Markers	Total
Commercial ads	.28 (.53)	1.09 (.97)	.47 (.66)	.65 (.91)	2.48 (1.39)
Noncommercial ads	.39 (.56)	.75 (.73)[a]	.50 (.65)	.18 (.38)[a]	1.82 (1.04)[a]
Columns	.58 (.63)[b]	.33 (.53)[ac]	.16 (.52)[a,c,d]	.06 (.23)[a]	1.12 (.90)[a,c,d]
Cartoons	.42 (.69)	.63 (.83)	.63 (.76)	.26 (.45)	1.95 (.91)
Book and film reviews	.51 (.58)	.44 (.59)[a]	.24 (.48)[c]	.13 (.34)[a]	1.32 (1.07)[a,c]
Letters to the editor	.58 (.66)	.33 (.57)[a,c]	.19 (.50)	.28 (.45)[a]	1.37 (.90)[a]

Note: a, b = The frequency of the use of markers in this genre was "a" lower or "b" higher than the frequency of the use of markers in commercial advertisements; c = The frequency of the use of markers in this genre was lower than the frequency of the use of markers in noncommercial advertisements; d = The frequency of the use of markers in this genre was lower than the frequency of the use of markers in cartoons. These differences were estimated with Bonferonni post hoc tests and are significant on the level of at least $p < .05$.

relatively more often a third party. This can be explained by the fact that this genre is primarily concerned with the evaluation of either an object (a book or film) or the creator of this object (the author or director).

The two genres that resemble the general distribution the closest are cartoons and letters to the editor. Cartoons only differ from the general distribution when incongruent information is taken into account: Incongruent information is less often present in the co-text than expected based on the general distribution. An explanation can be that cartoons tend to contain little written co-text. In contrast, letters to the editor have more often incongruent information than expected based on the general distribution. In addition, they are more often directly relevant.

Irony Markers Across Written Genres

In addition to the use of irony factors, we also investigate the ways in which irony markers are used in written discourse. A frequency analysis demonstrates that ironic utterances contain an average of 1.66 ($SD = 1.20$) irony markers. Table 4 shows the average number of irony markers per ironic utterance for the different genres. The average number of irony markers per ironic utterance was related to a text's genre, $F(5, 450) = 20.00$, $p < .001$, $\eta^2_p = .18$. A Bonferonni post hoc test indicates that ironic utterances in commercial advertisements have more irony markers than ironic utterances in noncommercial advertisements ($p < .01$), columns ($p < .001$), book and film

reviews ($p < .001$), and letters to the editor ($p < .001$). The Bonferonni post hoc test also showed that ironic utterances in noncommercial advertisements have more irony markers than ironic utterances in columns ($p < .01$) and book and film reviews ($p < .05$). Finally, the Bonferonni post hoc test shows that irony in cartoons has more irony markers than irony in columns ($p < .05$).

This first analysis indicates that genre differences can be found in the use of irony markers that are related to the modality of the genre: Irony in multimodal genres (i.e., commercial and noncommercial advertisements and cartoons) may be marked in a different way from irony in purely verbal genres (i.e., columns, book and film reviews, and letters to the editor).

A second issue considered the relationship between the usage of various categories of irony markers and the genres in the corpus. The general pattern of irony markers is reflected in the categories of schematic, morpho-syntactic, and typographic irony markers, $F_{schematic}(5, 450) = 15.53$, $p < .001$, $\eta^2_p = .15$; $F_{syntactic}(5, 450) = 6.53$, $p < .001$, $\eta^2_p = .07$; $F_{typographic}(5, 450) = 15.80$, $p < .001$, $\eta^2_p = .15$. Bonferonni post hoc tests mainly reveal that schematic, morpho-syntactic, and typographic markers are used less often in the purely verbal genres (columns, book and film reviews, and letters to the editor) than in the multimodal genres (commercial advertisements, noncommercial advertisements, and cartoons).[6]

Tropes are also used differently across purely verbal and multimodal genres. But unlike schematic, morpho-syntactic, and typographic irony markers, tropes are used more often in purely verbal than in multimodal genres, $F(5, 450) = 3.65$, $p < .01$, $\eta^2_p = .04$. A Bonferonni post hoc test indicates that tropes are used less often as irony markers in commercial advertisements than in columns ($p < .01$). The higher use of tropes as irony markers in book and film reviews ($p = .07$) and letters to the editor ($p = .07$) compared with commercial advertisements was marginally significant.

Relations Between Irony Factors and Irony Markers

We investigated how irony markers were used in relation to the various sublevels of irony factors. Table 5 shows the average number of irony markers per ironic utterance for the different irony factors. The first irony factor to be considered is the explicitness of the ironic evaluation, which can be explicitly or implicitly evaluative. A *t* test for independent samples shows that the total number of irony markers is higher in implicitly evaluative irony than in explicitly evaluative irony, $t(346.2) = 2.73$, $p < .01$, $r = .15$. A similar pattern was found for schematic, $t(375.1) = 3.36$, $p < .01$, $r = .17$, and typographic irony markers, $t(271.9) = 5.14$, $p < .001$, $r = .30$. In contrast, morpho-syntactic irony markers turned out to be used more often in explicitly evaluative irony than in implicitly evaluative irony, $t(453.8) = 3.48$, $p < .01$, $r = .16$.

The second irony factor to be considered is incongruence, which has the sublevels of incongruence in co-text and incongruence in context. The total number of irony markers is higher when incongruent information with a literal reading of the ironic utterance is present in the co-text than when incongruent information has to be derived

Table 5. Means (and Standard Deviations) for the Occurrence of Irony Markers and the Different Categories of Irony Markers (Tropes, Schematic, Morpho-Syntactic, and Typographic Markers) Related to the Levels of Irony Factors (Evaluativeness, Incongruence, Reversal of Valence, Target, and Relevance)

Irony Factor	Tropes	Schematic Markers	Morpho-Syntactic Markers	Typographic Markers	Total
Evaluativeness					
Explicitly evaluative irony	.47 (.58)	.51 (.70)[a]	.41 (.66)[b]	.13 (.37)[a]	1.52 (1.02)[a]
Implicitly evaluative irony	.43 (.62)	.76 (.84)[b]	.22 (.49)[a]	.43 (.73)[b]	1.85 (1.38)[b]
Incongruence					
Incongruence in cotext	.45 (.60)	.71 (.73)[b]	.37 (.66)	.19 (.45)	1.72 (.99)[b]
Incongruence in context	.51 (.61)	.37 (.61)[a]	.31 (.54)	.13 (.34)	1.33 (1.02)[a]
Target					
Sender	.40 (.59)	.28 (.45)[a]	.48 (.60)	.28 (.60)	1.43 (1.20)
Addressee	.64 (.49)	.58 (.69)	.53 (.61)	.14 (.35)	1.89 (.98)
Third party	.44 (.60)	.69 (.81)[b]	.26 (.56)[a]	.28 (.60)	1.66 (1.23)
Combination	.49 (.64)	.39 (.59)	.61 (.77)[b]	.20 (.46)	1.68 (1.08)
Reversal of valence					
Ironic praise	.48 (.62)[b]	.54 (.76)[a]	.31 (.60)	.26 (.57)	1.60 (1.23)[a]
Ironic blame	.33 (.49)[a]	.88 (.80)[b]	.39 (.58)	.27 (.60)	1.88 (1.12)[b]
Relevance					
Directly relevant irony	.50 (.60)[b]	.56 (.76)[a]	.33 (.61)	.21 (.52)[a]	1.59 (1.18)[a]
Indirectly relevant irony	.27 (.54)[a]	.85 (.76)[b]	.35 (.57)	.48 (.72)[b]	1.96 (1.23)[b]

Note: a, b = The frequency of the use of markers for this level of the irony factor was "a" lower or "b" higher than the frequency of the use of markers for another level of the irony factor. In the case of the irony factor of target, these differences were estimated with Bonferonni post hoc tests and were significant on the level of at least $p < .05$. The differences for the other irony factors were estimated with *t* tests for independent samples.

from the context, $t(421) = 4.07$, $p < .001$, $r = .19$. The same effect was found for the category of schematic irony markers, $t(356.0) = 5.16$, $p < .001$, $r = .26$.

The third irony factor to be considered is reversal of valence, which has the sublevels of ironic praise and ironic blame. The total number of irony markers is higher for ironic blame than for ironic praise, $t(438) = 2.06$, $p < .05$, $r = .10$. This general pattern is confirmed for schematic irony markers, $t(438) = 3.90$, $p < .001$, $r = .18$. In contrast, tropes are used more often as irony markers in ironic praise than in ironic blame, $t(206.5) = 2.55$, $p < .05$, $r = .17$.

The fourth irony factor is target, which has the sublevels of sender, receiver, third party, and a combination of sender, addressee, and/or target. No relationship was found between the various levels of the irony factor of targets and the total number of irony markers ($F < 1$). A relationship was found between target and the use of morpho-syntactic irony markers, $F(3, 452) = 6.90$, $p < .001$, $\eta^2_p = .04$. A Bonferonni post hoc test indicated that morpho-syntactic irony markers are used less often when the target is a third party than a combination between sender, addressee, and/or third party ($p < .01$). The higher use of morpho-syntactic irony markers when the target is either the addressee compared with a third party was a trend ($p = .06$). A relationship was also found between target and the use of schematic irony markers, $F(3, 452) = 4.95$, $p < .01$, $\eta^2_p = .03$. A Bonferonni post hoc test indicated that schematic irony markers are used more often when the target is a third party than when the target is the sender ($p < .01$).

The last irony factor to be considered is relevance, which has the sublevels of directly and indirectly relevant irony. The total number of irony markers is higher in indirectly relevant irony than in directly relevant irony, $t(454) = 2.56$, $p < .05$, $r = .12$. This general pattern is confirmed for schematic, $t(454) = 3.24$, $p = .001$, $r = .15$, and typographic irony markers, $t(110.8) = 3.39$, $p < .01$, $r = .31$. In contrast, tropes are used more often as irony markers in directly relevant irony than in indirectly relevant irony, $t(146.7) = 3.51$, $p < .01$, $r = .28$. These results show that irony markers are generally associated with one of the levels of the various irony factors, often the less frequently used level. Tropes show a pattern that deviates from the other categories of irony markers.

Discussion

In this article, we analyzed whether irony factors and markers are used differently in various written genres. Our analysis has demonstrated that, for the genres in the corpus, this question should be answered affirmatively. Every genre deviates in some way from the corpus' general distribution.

The main distinction in genre differences can be observed between the use of irony factors and markers in multimodal (i.e., cartoons and commercial and noncommercial advertisements) and purely verbal genres (i.e., columns, book reviews, and letters to the editor). For factors, irony in multimodal genres is relatively more often explicitly evaluative, ironic blame and indirectly relevant and more often has the addressee as its target. In contrast, irony in purely verbal genres is relatively more often ironic praise, is relatively more often directly relevant, and has a third party as its target.

These differences are also reflected in the use of irony markers across purely verbal and multimodal genres. Although tropes are mainly associated with the purely verbal genres, schematic, morpho-syntactic, and typographic markers are mainly related to the multimodal genres. Additionally, an ironic utterance from a multimodal genre generally has more irony markers than an ironic utterance from a purely verbal genre.

Like irony factors, the use of irony markers in the ironic utterance differs between purely verbal and multimodal genres.

These genre differences between purely verbal and multimodal texts may also be explained by looking at the individual genres. The most striking genre in the group of purely verbal genres is that of columns. Dutch columns usually contain an observation or comment of the author related to the topic of the column. Often, these observations are personal, which may explain why the sender is often the target of the irony in this genre. Besides, many columns typically serve to criticize somebody or something, which may explain the high use of ironic praise. At the same time, many columns in the corpus are written by Dutch literary authors such as Remco Campert, Arnon Grunberg, and Tommy Wieringa. This literary aspect may explain why the overall number of irony markers in this genre is relatively low; the authors seem to try to make their ironic utterances more complex.

In contrast, the genre of commercial advertisements is the most striking multimodal genre in the corpus. Commercial advertisements typically present a positive evaluation of a product, service, and/or corporation. Since a reader already knows that the final message is positive, the author of a commercial advertisement can use ironic blame relatively easy. The genre's default expectation thus makes it easier to solve the irony. Furthermore, to stimulate ad processing, advertisers may want to present their audience with a riddle that needs to be solved. This may explain why ironic utterances in this genre are more often implicitly evaluative and indirectly relevant than the ironic utterances in the other genres. At the same time, these riddles cannot be too difficult. After all, advertisers want their public to understand their advertisements. To help the addressee in doing so, the ironic utterances in this genre contain clues to help the reader (irony markers), which explains why the number of irony markers in ads is relatively high compared with the other genres.

As such, the present article opens up a procedure for empirically comparing verbal irony based on usage. In future research, this kind of analysis may be used to predict differences in processing of ironic utterances. Following the assumption that an increase in usage makes it easier to process a certain utterance as ironic (Giora, 2003), we may derive general predictions of which types of irony are easier to process. When looking at our irony factors results, it may for instance be noted that ironic praise is used more often than ironic blame (see also Jorgensen et al., 1984; Kreuz & Link, 2002), which may imply that the former type of irony is easier to process than the latter type.

With these processing assumptions, some striking patterns emerge from the data. For instance, the definition of an irony marker entails that that marker should help the reader in detecting the irony (Attardo, 2000a). From this assumption, it is plausible that irony markers should be used when ironic utterances are expected to be difficult to understand. In the case of the irony factors of valence and relevance, it would thus be expected that irony markers would be used more often for ironic blame and indirectly relevant irony than for ironic praise and directly relevant irony. When looking at

the data, these assumptions hold true for irony markers in general and for the categories of schematic and typographic markers.

The analyses of tropes as irony markers show that tropes often differ in their usage from other categories of irony markers. Tropes are mainly used as irony markers in ironic praise and directly relevant irony. This result may be explained by the difference between these types of irony markers. The category of tropes is related to the *content* of an ironic utterance; this group of irony markers requires some sort of reinterpretation to be noticed and understood. The other three categories of irony markers, instead, alert a reader by drawing attention to the *form* of an ironic utterance. It may thus be that tropes are a cognitively more demanding category of markers and work differently from the other categories of irony markers.

Some caveats may be noted about our findings. Of course, different languages may mark irony in different ways. In Dutch, diminutives can for instance mark irony. Since the English language does not have diminutives, this specific marker cannot be used in English. Other language-specific markers that have been associated with irony include the parenthetical focus discourse marker *tobože* in Croatian (Dedaic, 2005) and the marker *rɛ́* in Sissala (Blass, 1990). Close cross-cultural comparisons can thus reveal how various languages differ in the use of irony markers.

The findings of this corpus analytical study may be expanded by looking at other genres such as literary or academic texts. This comparison across genres can help illustrate how irony is used across different genres. Of course, it is also possible to select other genres from other modalities than the written domain and consider the use of irony in for instance speeches, talk shows, or film comedies. A second possibility is using texts from the same genres in the corpus, but from other cultural backgrounds and thus comparing irony in Dutch to irony in other languages and/or cultures.

Finally, a comment should be made about the phenomenon of irony markers. Of course, irony markers are not *always* used to mark irony. If somebody for instance exclaims "That's the best idea ever" when the idea was really a good one, hyperbole is used nonironically (and not as an irony marker). In fact, we showed that markers can easily be added to both ironic utterances and literal equivalents of these ironic utterances (see Burgers, Van Mulken & Schellens, 2012, Experiment 2). So, these markers may simply be used to mark a standpoint and may even be referred to as stance markers (see Burgers et al., 2012). This means that markers may alert the reader to the fact that the author takes some kind of position. It is then up to the alerted reader to infer that the author in fact uses irony.

This study expanded on the study by Hancock (2004) by investigating irony usage in different genres within one modality. We show that irony is used differently in all six genres of the corpus of this study, thus bolstering Hancock's (2004) claim that irony is used differently in different communicative situations. Differences can mainly be found between the purely verbal and the multimodal genres. As such, this study empirically opened up the research challenge as set forth by Gibbs and Colston (2007) to uncover the different ways in which irony is used in discourse.

Authors' Note

The research reported in this article is part of Christian Burgers's doctoral dissertation at the Department of Business Communication Studies at Radboud University Nijmegen (the Netherlands), supervised by the second author and the third author. Burgers is currently an assistant professor at the Department of Communication Studies at VU University Amsterdam (the Netherlands).

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Notes

1. Even though the definition of irony is important, it is not our primary goal in this article, and for an extensive explanation of the definition of ironic utterances, we refer to Burgers et al. (2011).
2. It should be noted that the terms *ironic praise* and *ironic blame* are used in two distinct ways in the irony literature. Some authors use ironic praise to refer to ironic utterances that are literally negative, such as "That's a horrible idea" (e.g., Filipova & Astington, 2008; Schwoebel, Dews, Winner, & Srinivas, 2000). In contrast, other irony scholars define ironic praise in the exact opposite way, namely, by referring to ironic utterances that are literally positive, such as "That's a great idea" (e.g., Poggi, Cavicchio, & Caldognetto, 2007; Poggi & D'Errico, 2010). In this discussion, we follow the position taken by the latter authors.
3. Of course, this third party is not necessarily a person but can also be an institution or a general norm. If a third party is an institution, a speaker can for instance ironically observe "Great that the Government increases the sales tax." In this utterance, no specific person, but the institution of the Government, is the target of the irony. Similarly, if a speaker ironically exclaims "Downsizing really improves the efficiency of a company," this person targets a general belief that downsizing is good for businesses.
4. The exact method was used to calculate p values when one or more expected counts were lower than 5. When all expected counts exceeded 5, the asymptotic method was used to calculate p values (Ellis, 2006, pp. 240-241).
5. In this inspection of residuals, the adjusted standardized residuals were inspected (e.g., Field, 2009, pp. 698-699). These scores can be interpreted as z-scores. So if the value of

this statistic was lower than −1.96 or higher than 1.96, the outcome was considered significant on a 5% level.

6. To be specific, columns have less schematic ($p < .001$), morpho-syntactic ($p < .01$), and typographic irony markers than commercial advertisements. Columns also have less schematic ($p < .01$) and morpho-syntactic irony markers ($p < .01$) than noncommercial advertisements and less morpho-syntactic irony markers than cartoons ($p < .05$). Book and film reviews have less schematic ($p < .001$) and typographic irony markers ($p < .001$) than commercial advertisements and less morpho-syntactic irony markers than noncommercial advertisements ($p < .05$). Finally, letters to the editor have less schematic irony markers than commercial ($p < .001$) and noncommercial advertisements ($p < .05$) and less typographic irony markers than commercial advertisements ($p < .01$). One exception to this difference between purely verbal and multimodal genres can be found; commercial advertisements contain more schematic ($p < .05$) and typographic irony markers ($p < .001$) than noncommercial advertisements.

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